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2.500 Desalination and Water Purification

Spring 2009

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HUB TESTING LABORATORIES INC.

Consulting and Testing Engineers

May 5, 2009

Report For: John H. Lienhard V
Massachusetts Institute of Technology

Hub ID: 20132

Project ID: 20132-1: Sous Sale Bay
20132-2: Phaeten family well
20132-3: Pestel Harbor

Date Received: April 22, 2009 & April 24, 2009

Scope: Three samples of water were received by Hub Testing Laboratory. It was requested that the samples be analyzed for specific parameters as below.

Results:

| Parameter | 20132-1 Results (mg/L unless noted) | 20132-2 Results (mg/L unless noted) | 20132-3 Results (mg/L unless noted) | EPA Maximum Contaminant Level (MCL) |
|-------------------------|---|---|---|--|
| Aluminum | 11.7 | 2.7 | 10.7 | 200 ppb |
| Antimony | Not detected | Not detected | Not detected | 6 ppb |
| Arsenic | < 1.0 | 1.8 | <0.1 | 5 ppb |
| Bismuth | Not detected | Not detected | Not detected | 2000 ppb |
| Beryllium | Not detected | Not detected | Not detected | 4 ppb |
| Cadmium | Not detected | Not detected | Not detected | 5 ppb |
| Chromium | Not detected | Not detected | Not detected | 100 ppb |
| Cobalt | Not detected | Not detected | Not detected | None |
| Copper | Not detected | Not detected | Not detected | 1300 ppb |
| Iron | 7.2 | 1.0 | 101 | 300 ppb |
| Lead | Not detected | Not detected | 7.7 | 15 ppb |
| Calcium (Hardness) | 285 | 128 | 640 | None |
| Magnesium (Hardness) | 427 | 192 | 960 | None |
| Manganese | 12.0 | Not detected | Not detected | 50 ppb |

| Parameter | 20132-1 Results (mg/L unless noted) | 20132-2 Results (mg/L unless noted) | 20132-3 Results (mg/L unless noted) | EPA Maximum Contaminant Level (MCL) |
|------------------------------|---|---|---|--|
| Mercury | Not detected | Not detected | Not detected | 2 ppb |
| Nickel | Not detected | Not detected | Not detected | None |
| Thallium | 15.3 | Not detected | Not detected | 2 ppb |
| Selenium | Not detected | Not detected | Not detected | 50 ppb |
| Silver | Not detected | Not detected | 4.7 | 100 ppb |
| Sodium | 6,100 | 2,080 | 18,500 | None |
| Alkalinity | 180 | 420 | 200 | None |
| Bromine | Not detected | Not detected | Not detected | None |
| Chloride | 961 | 904 | 1033 | 250 ppm |
| Color | 3 | 3 | 3 | 0-15 Color Units |
| Conductivity | 13840 | 7720 | 20200 | None |
| Fluoride | Not detected | Not detected | Not detected | 4 ppm |
| Hardness | 712 | 320 | 2280 | 0-75 soft, 76-150 normal, 150+ hard |
| Nitrates | Not detected | 0.5 | Not detected | 10 ppm |
| Phosphates | 0.10 | 0.31 | 0.54 | None |
| pH | 6.99 | 7.10 | 7.31 | 6.5 – 8.5 pH units |
| Sulfates | 270 | 280 | 320 | 250 ppm |
| Turbidity | 0.64 | 0.17 | 0.13 | 0-5 NTU |
| Total Dissolved Solids | 6,920 | 3,860 | 10,023 | 500 ppm |
| Free Chlorine | 0.04 | 0.06 | 0.22 | 4 ppm |
| Total Chlorine | 0.10 | 0.13 | 0.76 | 4 ppm |

Lab Certification # 68-04402



Susan Boyle, Vice-President
Hub Testing Laboratory